Marcus (H. D.)

Treatment of croupous pneumonia

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## TREATMENT OF CROUPOUS PNEUMONIA.

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Although very much has been written in late years upon this subject, and a great many theories advanced as to the treatment of this disease, we are to-day still at sea as to the best and most rational way of combating pneumonia. The chief aim of all investigators has been to precipitate the crisis, and all manner and forms of treatment have been advised to reach this end. Each treatment is published, coupled with a report of "so many cases" successfully conducted, and on the very footsteps of such a report follows another showing positive failure. Whether the treatment has not been followed to the letter, or whether the cases were of a different grade of severity is never reported, and we are again left with a "new" treatment at our disposal, which, succeeding at the hands of one practitioner, has utterly failed at the hands of another. The latest treatment devised, and apparently a very rational one, comes from the Klemperer brothers, who, regarding pneumonia as a specific disease, have strongly recommended the intra-cellular injections of serum taken from a convalescent pneumonic patient. The treatment itself appears very rational, but even if it should prove of the greatest value, we will find that it will be one of the most difficult forms of treatment to be carried through.

In hospital practice, where the patient is more or less under his physician's control, the treatment may be carried out more successfully, but in private practice, where we have any number of relations to veto any extraordinary proceedings in the treatment of our patients, there are obstacles thrown in our way, which, to the average practitioner, will be insurmountable. In the first place, to obtain the serum we must find some convalescent patient who is known not to be syphilitic or tuberculous, and get his consent for general blood-letting. Considering the marked debility subsequent to an attack of pneumonia, we cannot be very much surprised to find our patient reluctant "to be bled." Secondly, if the consent of such a patient has been obtained, we may find on the other hand, obstacles thrown in the way by the patient to be benefitted. The danger of syphilitic or tuberculous infection is one always to be dreaded, and at this age, when these diseases are so prevalent, the greatest caution must be observed. Although I have had no personal experience with this form of treatment, I have had occasion to observe its results. The modus operandi, as devised by its propogators, is as follows: A convalescent pneumonic patient is bled from the median basilic vein, or any other vein in easy reach, observing all antiseptic precautions, and the blood preserved in a sterilized flask. As soon as the serum has well separated, it is taken up into a sterilized graduate pipette, and about from 15 to 50 c. c. injected into loose cellular tissue (generally the gluteal region of the leg). This may be repeated in from 24 to 48 hours. It is then claimed that by this method crisis may be hurried, and will appear two or three days earlier, thereby improving all symptoms. The subject is too new, and it is still too early to make a statement as to its value. The few cases that I have seen treated with pneumonic serum, were in no way benefitted by this treatment, but still, there may have been a defect in the modus operandi, and I am in no position to judge at present of its value.

Another treatment, highly recommended by Dr. Petresco, is the administration of large doses of digitalis (60–120 grains per diem), and this to be continued for from four to five days. Dr. Petresco has given between 300 to 350 grains in five days, and claims the most marked results with such treatment. In a total of 825 cases thus treated, the mortality was only 2.06 per cent. In all cases treated by this method, he claims a fall of temperature after one dose of about 1 to 3°C., and after two to three doses, a fall of from 5 to 6°C. The pulse rate was reduced about 40 to 60 beats, and the general condition of the patient improved. He claims no toxic effects from this treatment.

Recognizing the symptoms peculiar to digitalis poisoning, coupled with a number of experiments made by himself with this drug, I must say that such large doses as 60 to 120 grains of digitalis leaves per diem, are undoubtedly toxic. A fall in the frequency of the pulse beat from 120 to 60, together with the character of the pulse that I had occasion to observe, is undoubtedly an indication of toxæmia. My experience with this did not show me, as claimed by Petresco, a fall in temperature; in fact, at no time did I observe any amelioration of symptoms when employing this treatment exclusively.

One form of treatment which at one time was in great vogue, but which to-day is very much neglected, is venesection. In venesection we have a therapeautic measure which merits the most complete investigation. There is no treatment which I have employed in both hospital and private practice which has given me more prompt satisfaction than venesection. Whether local or general, in all instances the employment showed most marked results.

It has been my habit lately, in all cases in which I saw the patient during the first week of the disease (the stage of congestion), and even as late as the stage of red hepatization, to bleed—if the patient's general appearance admitted general blood-letting, I always employed

it, otherwise, wet cups or leeches were used. I generally extracted from 15–30 ounces of blood, and the result was a marked improvement in the patient's condition. The temperature was generally reduced from 20 to 30 F. The pulse became slower and stronger, and the respirations became slower and more regular. Wherever I employed general blood-letting, I always opened the median basilic vein, under proper antiseptic precautions, and extracted from 20–30 ounces of blood.

Local blood-letting was employed by either using leeches or wet cups. Twelve to fifteen leeches, or as many cups, were applied to the area of consolidation, and about 15–20 ounces of blood extracted. The area of bleeding was then covered with turpentine stupes, and thereby, a slow oozing obtained. As soon as the pulse indicated, the bleeding was stopped, and the patient placed on routine treatment, such as ammon. carbonate with ammon. chloride, five grains each, every three hours. Quinine sulph. gr. 2½, combined with antikamnia gr. 2½ every two or three hours.

The use of antikamnia in combination with quinine in the treatment of pneumonia, merits investigation. The use of quinine is always more or less accompanied with a number of symptoms which show the drug to be depressing in its action, while in combination with antikamnia the result is very favorable. The action of antikamnia as a pain-obtunder causes an improvement in the jerky and rapid respiration so peculiar to pneumonia, besides improving all local symptoms. The cough becomes ameliorated, the pulse regains its normal beat, becoming slower and fuller, and the temperature becomes quickly normal.

I have given this combination of quinine and antikamnia a thorough trial in both hospital and private practice, and can testify to its fitness as a therapeutic measure in the treatment of pneumonia. Whenever cardiac stimulation was indicated, nitro-glycerin (1 per cent solution), one to two drops every hour or until the physiological limit was reached, as well as caffeine, strychnia, or camphor were given, either by the mouth or hypodermically. The diet consisted exclusively of milk. For the delirium, ice to the head, and chloralamid in 15 to 20 grain doses were prescribed. As soon as the patient became convalescent, the following mixture was ordered for the cough:

℞ Potassii Iodidi.....
Ammon. Iodidi.....aa ℥ i
Syr. Scillæ..... ..℥ ii
Mist. Glycyrrh. Co., q. s....℥ xxiv
Mx. Sig.:—Two teaspoonfuls in three hours.

In conclusion, I wish to quote a case, which, owing to its severity, and its ultimate recovery, was very interesting to me.

Case I. A 48-year old clerk was seen by me on the third day after the initial chill. Patient presented the appearance of a robust man. and gave the following history: Had been drinking rather heavily for two or three weeks. On the third of the month had a sudden chill, and felt unable to attend to his work. The chill was soon followed by profuse perspiration and pain in the right side. Began to cough two days later, and expectorated considerably. Examination on the third day showed face flushed, especially on right, resembling mahogany color. Herpes on lips; tongue white and uniformly coated. Throat and mouth normal. Cough, with expectoration of viscid, tenacious, rusty mucus. Physical examination showed over right lung, diminished movement at base, both anteriorly and posteriorly. Vocal and tactile fremitus increased at base. Percussion note, normal at apex. Dullness at base, both anteriorly and posteriorly. Typical crêpitant râles over base of right lung. Broncho-vesicular breathing over middle, and partially over lower lobe. Indications pointing to general blood-letting. About one quart of blood was abstracted from median basilic vein. Temperature fell in three hours 1.2-5° (from 104 2-5 to 103°). Prescribed ammon. chlor. and ammon. carb. aa gr. v. every three hours, also one dose of calomel (gr. v.).

The following record of the case was then noted: April 6.—Passed a fairly good night. Temperature had fallen during the night to 99½°. This a. m. it is 102°. Heart fairly good. Face less flushed. Respirations short and painful. Bronchial breathing at base. Pleural friction sound at base of right lung, and some subcrêpitant râles. Voided 21 ounces urine in twenty-four hours, and had three soft yellow stools. Sputum contains diplococci in abundance. Slightly delirious. Hands and lips are blue. Complains of considerable pain in right side. Morphia sulph., gr. ¼, and atropia sulph., gr. 1-60, given hypodermically. Ice cap to head ordered if delirious. April 7.—Patient has been very bad to-day. Temperature, 103.3°. Complains of considerable pain over right lung. Face markedly cyanosed. Pulse dichrotic. Ordered quinia sulph., gr. iii, et antikamnia, gr. iii, every three hours. Also whiskey, ℥ iv, every hour. Three hours later, after the second dose of quinia and antikamnia, the pain seems less severe. Respiration more regular and slower. April 8.—This a. m. abdomen greatly distended with flatus, which was remedied by rectal catheterization and enema of soap suds, Oii, and turpentine, ℥ xvi. Pain in right side less severe. Antikamnia and quinia discontinued (patient has taken 21 grains of each). Pulse still dichrotic. Caffeine citrate, gr. v, every two hours, prescribed. April 9.—Patient again delirious. Temperature 102.4°. Respirations, 48 per minute. Pulse, 124. Pain is again severe. Antikamnia and quinine, gr. iii each, every two hours.

April 10.—Patient greatly improved. Respiration 36. Temperature 100°. Pulse 104. Takes at present ammon. carb., gr. x, every three hours. Whiskey every two hours. Caffeine citrate, gr. v. every three hours. Antikamnia and quinine, each gr. iii every two hours. This patient then began gradually to improve, and left his bed on the twenty-third day. In this case blood-letting was only temporarily beneficial, while the exhibition of antikamnia and quinine was of great benefit. Morphia in this case was contra-indicated, owing to a chronic nephritis, which was recognized by the pressure of albumen and casts in the urine.